

**REMARKS**

Applicants are amending claims 1, 3, 5, 9, 11, 13, and 17-19, and are canceling claims 4, 7, and 15, without prejudice to the subject matter claimed thereby. Therefore, claims 1-3, 5, 6, 8-14, and 16-19 currently are pending in the above-captioned patent application and are subject to examination. No new matter is added by the foregoing amendments, and these amendments are fully supported by the specification. Reconsideration of the above-captioned patent application is respectfully requested in view of the foregoing amendments and the following remarks.

**1. Summary of Rejections**

In the Office Action mailed July 1, 2004, the Examiner rejected claims 1 and 17 under 35 U.S.C. § 102(b), as allegedly being anticipated by U.S. Patent No. 5,546,903 to Satou *et al.* ("Satou"). The Examiner also rejected claims 1-19 under 35 U.S.C. § 102(b), as allegedly being anticipated by U.S. Patent Publication No. 2001/0039939 to Nada. Applicants have canceled claims 4, 7, and 15, without prejudice to the subject matter claimed thereby. Therefore, the rejections of claims 4, 7, and 15 are rendered moot. Applicants respectfully traverse the remaining rejections, as follows.

**2. Anticipation Rejection of Claims 1 and 17 in View of Satou**

The Examiner rejected claims 1 and 17 as allegedly being anticipated by Satou. Applicants respectfully traverse this rejection, as follows.

Applicants independent claim 1 describes a system for controlling the opening of a throttle valve, comprising “learning-controlling means for learning-controlling a fully-closed value of the opening of the throttle valve . . .; and updating inhibiting means for inhibiting next updating of the learned fully-closed value by the learning-controlling means only in valve opening direction **after the learned fully-closed value has once been updated in the valve opening direction**, until the operating state of the vehicle moves outside the prescribed operating state and then again returns to the prescribed operating state.” For example, as set forth in Applicants’ specification, “when the learned fully-closed value is updated toward the opening direction, further updating toward the opening direction is prohibited until the operating state of the vehicle moves outside a prescribed operating state range and then returns to within the prescribed operating state range.” Appl’n, Page 11, Lines 20-23. Applicants’ independent claim 17 includes similar limitations.

In contrast, Satou merely describes a system in which a first control system controls a throttle valve in accordance with movement of an accelerator pad, except when (1) the vehicle is under traction control; and (2) the throttle valve is pivoted by the motor to an extreme position beyond the normal full-closed position. See, e.g., Satou, Column 7, Lines 17-28 and 41-49. When the above-described conditions (1) and (2) occur, a second control system pivots, with the aid of an electric actuator, the throttle valve in a direction to reduce the open degree of the throttle value irrespective of the operation of the first control system. See, e.g., *Id.* at Column 8, Lines 10-16. When the above-described conditions (1) and (2) no longer are satisfied, the first control system regains control of the throttle valve.

The second control system described in Satou merely reduces the open degree of the throttle valve and prevents the first control system from controlling the

throttle valve when the above-described conditions (1) and (2) occur. However, when the first control system increases the open degree of the throttle valve while the vehicle is in a prescribed operating state, the second control system does not prevent the first control system from further increasing the open degree of the throttle valve until the vehicle moves outside the prescribed operating state and then again returns to the prescribed operating state, as set forth in independent claims 1 and 17.

For example, if the first control system increases the open degree of the throttle valve while in the prescribed operating state, and thereafter the vehicle **remains** in the prescribed operating state, the first control system is able to further increase the open degree of the throttle valve. Only when the above-described conditions (1) and (2) occur is the first control system prevented from increasing the open degree of the throttle valve. As such, the preventing of further updates **does not in any way depend on the existence of a previous update by the first control system**, and merely depends on the satisfaction of the above-described conditions (1) and (2). Therefore, Applicants respectfully request that the Examiner withdraw the anticipation rejection of independent claims 1 and 17 in view of Satou.

3. Anticipation Rejection of Claims 1-3, 5, 6, 8-14, and 16-19 in View of Nada

The Examiner rejected claims 1-3, 5, 6, 8-14, and 16-19 as allegedly being anticipated by Nada. Applicants' respectfully traverse this rejection, as follows.

a. Independent Claims 1, 9, and 17

As set forth above, Applicants independent claim 1 describes a system for controlling the opening of a throttle valve, comprising "learning-controlling means for

learning-controlling a fully-closed value of the opening of the throttle valve . . .; and updating inhibiting means for inhibiting next updating of the learned fully-closed value by the learning-controlling means **only in valve opening direction** after the learned fully-closed value has once been updated in the valve opening direction, until the operating state of the vehicle moves outside the prescribed operating state and then again returns to the prescribed operating state.” For example, as set forth in Applicants’ specification, “when the learned fully-closed value is updated toward the opening direction, further updating toward the opening direction is prohibited until the operating state of the vehicle moves outside a prescribed operating state range and then returns to within the prescribed operating state range.” Appl’n, Page 11, Lines 20-23. However, **updating in the valve closing direction is not prohibited** while updating in the valve opening direction is prohibited. Applicants’ independent claims 9 and 17 include similar limitations.

In contrast, Nada describes a system in which **each** of a learning value addition process and a learning value subtraction process are **prohibited** when a re-learning inhibition flag Frln0 is set to 0. See, e.g., Nada, Figures 6 and 7 (Steps S301 and S401, respectively). Because both the learning value addition process and the learning value subtraction process are prohibited when Frln0 is set to zero, Nada does not disclose or suggest inhibiting next updating of the learned fully-closed value by the learning-controlling means **only in valve opening direction** after the learned fully-closed value has once been updated in the valve opening direction, until the operating state of the vehicle moves outside the prescribed operating state and then again returns to the prescribed operating state, as set forth in independent claims 1, 9, and 17. Therefore, Applicants’ respectfully request that the Examiner withdraw the anticipation rejection of claims 1, 9, and 17 in view of Nada.

b. Anticipation Rejection of Independent Claims 5, 13, and 19

Applicants' independent claim 5 describes a system for controlling the opening of a throttle valve "wherein the learning-controlling means updates the learned fully-closed value in a valve closing direction by a first prescribed amount when the detected throttle opening is smaller than the learned fully-closed value, while updating the learned fully-closed value in the valve opening direction by a second prescribed amount **which is smaller than the first amount** when the detected throttle opening is greater than the learned fully-closed value." Independent claims 13 and 19 include similar limitations.

In contrast, Nada describes a system in which during a learning value subtraction process a full-closed position output value of an accelerator  $\theta_{close}$  is updated by subtracting a first predetermined amount  $\theta_1$ , and during a learning value addition process  $\theta_{close}$  is updated by adding a second predetermined amount  $\theta_2$ . Nevertheless, Nada does **not** disclose or suggest that second predetermined amount  $\theta_2$  is less than first predetermined amount  $\theta_1$ . Therefore, Applicants' respectfully request that the Examiner withdraw the anticipation rejection of independent claims 5, 13, and 19 in view of Nada.

c. Independent Claims 3, 11, and 18

Applicants have amended independent claims 3, 11, and 18 to depend from allowable independent claims 1, 9, and 17, respectively. Therefore, Applicants respectfully request that the Examiner also withdraw the anticipation rejection of claims 3, 11, and 18.

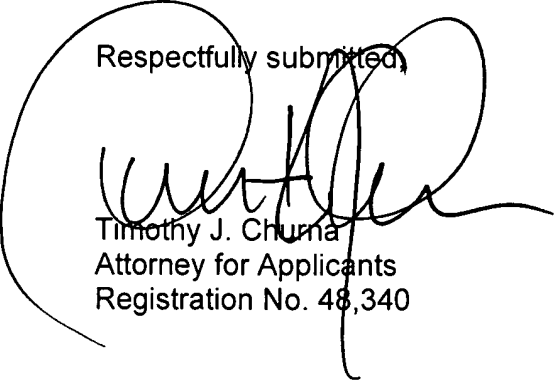
d. Anticipation Rejection of Dependent Claims 2, 6, 8, 10, 12, 14, and 16

Claims 2, 6, 8, 10, 12, 14, and 16 each depend from one of allowable independent claims 1, 5, 9, and 13. Therefore, Applicants respectfully request that the Examiner also withdraw the anticipation rejection of claims 2, 6, 8, 10, 12, 14, and 16.

**CONCLUSION**

Applicants respectfully submit that the above-captioned patent application is in condition for allowance, and such action is earnestly solicited. If the Examiner believes that an in-person or telephonic interview with Applicants' representatives would expedite the prosecution of the above-captioned patent application, the Examiner is invited to contact the undersigned attorney of records. Applicants believe that no fees are due as a result of this submission. Nevertheless, in the event of any variance between the fees determined by Applicants and those determined by the U.S. Patent and Trademark Office, please charge any such variance to the undersigned's Deposit Account No. 01-2300.

Respectfully submitted,



Timothy J. Churna  
Attorney for Applicants  
Registration No. 48,340

**Customer No. 004372**  
ARENT FOX, PLLC  
1050 Connecticut Ave., N.W., Suite 400  
Washington, D.C. 20036-5339  
Telephone No. (202) 715-8434  
Facsimile No. (202) 638-4810

CMM/TJC:klf